

Tinder Play Value Estimate

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Exec Summary:

- Play BD StratOps team created a model to compare the value Play delivers against the revenue share paid by a developer on their consumer spend. Full details of the model can be found [here](#) <which link should this go to?>. We plan to present this model in more detail in the coming weeks.
- Two key points that we believe may underlie Tinder's decision-making:
 - Despite generating the highest apps revenue from Play, Tinder severely under indexes on the % of installs coming from Play driven sources (e.g. Prex, Related etc.) vs dating peers (Pairs, OkCupid, Meetic) and games. **In 2018, only 8% of Tinder's installs came from Play driven sources** vs. 15% for OKC and 27% for Meetic. This bolsters their assertion that "people mostly come to Play looking for Tinder".
 - The relative discovery value they have been deriving from Play has decreased since 2017, due to an increasing share of acquisitions coming from Search and Search driven re-installs. But their revenue has been increasing y/y. Thus the team estimates that if you compare the value of non-Search driven discovery vs. revenue share paid, **Tinder is now deriving only 10% of the revenue share value vs. the 30% they pay.**
- Note that the model does not yet incorporate the value of publishing tools, EAPs, fraud detection, custom co-marketing partnerships etc. that we do with them that Tinder has told us they value and care about. These are difficult to put a \$ value on, but the team is looking at how to incorporate so we can paint a more complete picture.

Commented [1]: +Michael Marchak added this comment. do you want to create a specific forum for this? might be worth doing it in partnership with pat's team's research on the value of play?

Commented [2]: I think it should be separate.

Any ideas for the best forum?

Tinder Overview:

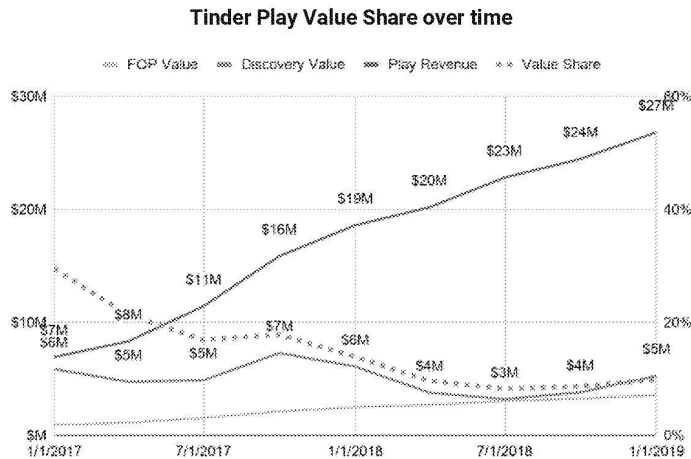
Definitions:

- *Play Value Deficit = The Quantifiable Value Play delivers < Play's 30% Rev Share*
- *Play Value Surplus = The Quantifiable Value Play delivers > Play's 30% Rev Share*
- *Play Value Breakeven = The Quantifiable Value Play delivers = Play's 30% Rev Share*

Tinder currently has a Play Value Deficit, which is growing worse over time.

- Play Value was at 30%, breakeven, at the start of 2017.
- However, Play Value has consistently declined since then, to where it is now at 10%.
- This growing Value Deficit is caused primarily by Tinder's consistent Revenue Growth, versus a flat Play Value.
- In particular, the value from Discovery peaked in 2017 and has declined since.

EXHIBIT 11110



2017 Slight Play Deficit: Revenue grew but so did Value from Installs.

- Tinder's Revenue grew quickly during this year, over +128% growth Q4'17 vs Q1'17
- Whilst Discovery Value from Installs did not grow at the same rate, it grew consistently over the year. This indicates that Play consistently drove more installs to Tinder over the course of the year. Discovery Value peaked at the end of 2017 (+24% Q4'17 vs Q1'17).

2018 Strong and Worsening Play Deficit: During this same time frame, revenue continued to grow but Play Value was largely flat. It was flat only because FOP Value grew (due directly to Consumer Spend growth), while Discovery Value declined.

- Tinder's Revenue continued to grow quickly, +\$145M and 100% YoY in 2018.
- However, Play Value no longer kept pace.
 - Play Value technically grew +\$400k and 1% YoY during this same time frame. However, all growth is driven by FOP Value.
- Discovery Value from Installs gradually declined in 2018 (-25% yoy).
 - Play Owned Reinstalls begins to account for a greater portion of Discovery Value, from 66% - 70%. This is not necessarily a problem as some may view Reinstalls to be valuable.

2019 Continued Worsening Play Deficit: During the start of 2019, Tinder's revenue continues to grow, whilst Play Value continues to remain flat.

- Tinders Revenue continues to grow quickly +\$27M and +44% Q1'18 vs Q1'17. Although growth is no longer at the same speed as in 2018.
- Again, Play Value does not keep pace.
 - Play Value grew +\$368K and 4% YoY, but all of the growth is driven by FOP Value.

- Discovery Value from Installs has declined Q1'19 vs Q1'18 (-13.6%) and is even below that of Q1'17 (-10%).
 - Play Owned Reinstalls continues to account for ~70% of Discovery Value.
- We should expect the rest of the year to get worse. Q1 in 2018 was a peak for Discovery Value. It continued to decline in each of the following quarters until Q1 2019.
 - If this trend continued, we'd likely expect Play Value to decline in each of the following quarters, whilst Tinder Revenue continued to grow.

Value Breakdown

The largest driver of Play Value are Play Owned Reinstalls (40%), followed by Credit Card (22%), Play Owned New Installs (19%), and DCB (12%).

Tinder Value Breakdown (No Search)

(Period: 2018Q1-2019Q1)

Play Value	\$38.0M	
Play Rev	\$112.9M	
Consumer Spend	\$376.3M	
Value Breakdown		
Discovery Value	\$22.2M	58.5%
FOP Value	\$15.2M	39.9%
Delivery Value	\$6M	1.6%
Discovery Value Breakdown		
Play Owned New Installs Value	\$7.1M	18.8%
Search New Installs Value	\$0M	0.0%
Play Owned Reinstalls Value	\$15.1M	39.7%
Search Reinstalls Value	\$0M	0.0%
FOP Value Breakdown		
Credit Card Value (3% of consumer spend)	\$8.4M	22.2%
Paypal (3% of consumer spend)	\$1.6M	4.1%
Play Card (9.5%)	\$6M	1.7%
DCB (13.5%)	\$4.5M	11.9%

Tinder vs Peers:

There's some nuance on how we compare across peers.

- In absolute value, Tinder does receive more Play Value than its peers.
 - This makes sense, as Tinder is the largest dating app, and should receive more Installs from Play.
- Relative to its Revenue, Tinder receives less Play Value than its peers.

- For example, Tinder's Value share is just 10%, a Play Value deficit. This is in contrast to OKCupid which as a Value Share of 59%, a Play Value surplus.
- In short, we provide relatively more value to other dating apps which generate less revenue.
- CPI in developed market: tinder \$4.3 vs pairs \$6.2, okcupid \$4.4 and pof \$2.7
- CPI in emerging market: tinder \$1.1\$ vs pairs \$1.38, okcupid \$0.6 and pof \$0.67

Value Comparison across Sampling of Dating Apps

(Period: 2018Q1-2019Q1)

	Play Value	Play Rev	Consumer Spend	Play Value Share
com.tinder	\$37.4M	\$112.9M	\$376.3M	10%
com.okcupid.okcupid	\$4.5M	\$2.3M	\$7.5M	59%
com.pof.android	\$13.1M	\$2.2M	\$6M	2299%
jp.eure.android.pairs	\$9M	\$1.6M	\$5.4M	16%
net.ilios.android.meetic	\$6M	\$0M	\$0M	N/A

Value Distribution across Sampling of Dating Apps

(Period: 2018Q1-2019Q1)

	Play Value	Play Owned New Installs	Play Owned Reinstalls	FOP	PO New Installs %	PO Reinstalls %	FOP %
com.tinder	\$37.4M	\$7.1M	\$15.1M	\$15.2M	19%	40%	41%
com.okcupid.okcupid	\$4.5M	\$2.0M	\$2.2M	\$3M	44%	49%	7%
com.pof.android	\$13.1M	\$3.6M	\$9.5M	\$0M	28%	72%	0%
jp.eure.android.pairs	\$9M	\$2M	\$1M	\$6M	21%	13%	67%
net.ilios.android.meetic	\$6M	\$5M	\$2M	\$0M	78%	30%	0%

Model Overview

Play Value, Deficit & Surplus definitions

We compare the Value Play delivers (referred to as *Play Value*) with the revenue it receives from a developer (referred to as *Play Revenue*). To do this, we normalize Play Value and Play Revenue by dividing with developer's consumer spend. This allows us to compare x% (value share) vs 30% (rev share)

- When $x\% > 30\%$, the developer receives more value from Play than it pays to Play;
- When $x=30\%$, the value the developer receives from Play and the money developer pays to Play breaks even;
- When $x<30\%$, the developer receives less than what it pays .
 - Note, even when $x<30\%$, the developer is still receiving value from Play.

Play Value Key Components:

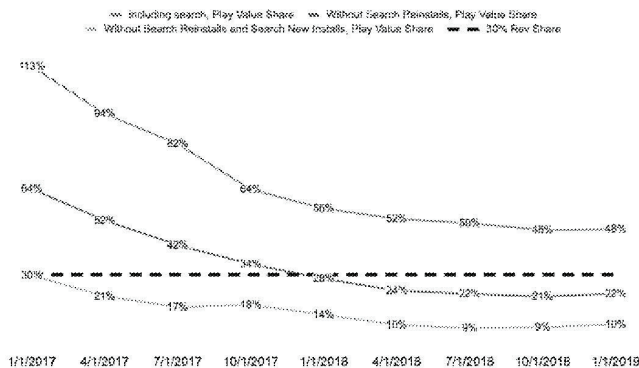
- **Play revenue:** We take an IAP focused approach - we calculate play revenue by multiplying consumer spend with a fixed rate 30%
 - We do not currently take into account the lower rev share (15%) for subscriptions from 2nd year onwards.
 - This will not change the situation for Tinder. We see Tinder's effective revenue share is ~28%.
- **Play value:** 3 main components -
 - *Discovery value* = (# Installs by Play Owned Source) * (\$/Install)
 - \$/install is CPI* discount ratio based on install type; CPIs currently from UAC and change by genre and country
 - Play Owned Sources are Smerch, Prex, Related, Topchart
 - Search is not included
 - *FOP value* = (\$ Spend by Source) * (Value/\$ Spend)
 - Value/\$ Spend currently Google Costs
 - *Delivery value* = (Volume of Data) * (Price/Data)
 - Price/Data currently Google Cloud pricing

Appendix (Reference only, data from Older Model which includes value of Search)**The Impact of Removing Search**

If we were to remove only re-installs the picture improves, but Play Value remains negative.

- Search reinstalls: 54% of play value, which is questionable considering tinder's user behavior
 - If we remove the value from search reinstalls completely, play's value share would be roughly 22% (vs 48% before and 30% rev share; now play delivers less value than it receives)
- Search installs: 26% of play value; for similar reasons, we might need to remove the value from search installs
 - If we remove both search reinstalls and search installs, now play's value share would be 10% (vs 48% before and 30% rev share; now play delivers 1/5 value of what it receives)

Play Value/Consumer Spend vs Play Rev share (30%) Over Time

**PART II: TINDER OVERVIEW (includes search value)****2018 to 2019Q1 summary:**

Using current model, Tinder receives \$190M play value and pays \$113M play revenue, leading to a value share of 51% (higher than rev share 30%).

- However, the biggest driver for Tinder's play value is search reinstalls (54%), followed by search installs (26%), then play owned reinstalls (8%)
- Play owned installs only accounts for 4% of the total value, significantly lower than its peers (okcupid: 15%, pof 10% and meetic 27%).
 - In comparison to other Game Developers that have been reviewed, Play Owned Installs drives an abnormally low amount of Play Value.
- FOP drives 8% of play value, with 4.4% from Credit Card, 2.4% from DCB, 0.8% Paypal and 0.3% Card
- Delivery only drives 0.3% of play value, which we can ignore

Value Comparison across Sampling of Dating Apps

(Period: 2018Q1-2019Q1)

package_name	Play Value	Play Rev	Consumer Spend	Play Value Share (vs 30%)
com.okcupid.okcupid	\$12.8M	\$2.3M	\$7.5M	171%
com.pof.android	\$37.4M	\$2M	\$6M	6554%
com.tinder	\$190.3M	\$112.9M	\$376.3M	51%
jp.eure.android.pairs	\$2.0M	\$1.6M	\$5.4M	37%
net.ilius.android.meetic	\$1.7M	\$0M	\$0M	-

Tinder Value Breakdown

(Period: 2018Q1-2019Q1)

Period: 2018Q1-2019Q1

Play Value	\$190.3M	
Play Rev	\$112.9M	
Consumer Spend	\$376.3M	
Value Breakdown		
Discovery Value	\$174.5M	91.7%
FOP Value	\$15.2M	8.0%
Delivery Value	\$.6M	0.3%
Discovery Value Breakdown		
Play Owned New Installs Value	\$7.1M	3.8%
Search New Installs Value	\$49.6M	26.1%
Play Owned Reinstalls Value	\$15.1M	7.9%
Search Reinstalls Value	\$102.7M	53.9%
FOP Value Breakdown		
Credit Card Value (3% of consumer spend)	\$8.4M	4.4%
Paypal (3% of consumer spend)	\$1.6M	0.8%
Play Card (9.5%)	\$.6M	0.3%
DCB (13.5%)	\$4.5M	2.4%

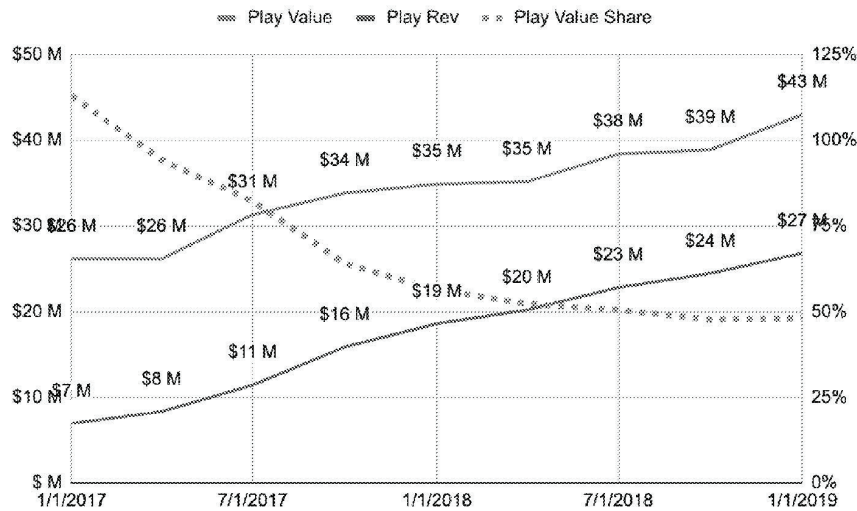
Comparison with other titles:

- Play value share: tinder 51% vs pairs 37% (>30% but close), okcupid 171% and pof 6554%
 - Other similar apps get more Play Value from Google. The one exception is Pairs, which is JP focused and has limited Discovery Value potential.

- FOP contribution to play value: tinder 8% vs pairs 30%, okcupid 2% and pof <0.1%;
 - Pairs has much higher FOP share because of the regional FOP preference of it's users. Its high DCB share (DCB cost to play is 13.5% of consumer spend vs e.g. Credit Card 3%), is seen across most JP focused apps and games.
- Play owned installs share of play value: tinder lowest (4%) vs pairs 9%, okcupid 15% and pof 10%
 - Tinder gets the most absolute volume of Play Owned installs and corresponding value from those installs. However, Tinder gets relatively more value from Search.
- Search (including installs and reinstalls): tinder highest (80%) vs pairs (55%), okcupid (65%), pof (65%)
 - All of the dating apps listed get more value from search than Play Controlled sources.
- CPI in developed market: tinder \$4.3 vs pairs \$6.2, okcupid \$4.4 and pof \$2.7
- CPI in emerging market: tinder \$1.1 \$ vs pairs \$1.38, okcupid \$0.6 and pof \$0.67

Over time from 2017:

- Play value share: decreased significantly in the past 2 years: 113% (2017Q1) -> 48% (2019Q1)
- Discovery value share: 96% (2017Q1) -> 91% (2019Q1)
 - Play owned installs: 9% -> 4%
 - Search installs: 31% -> 26%
 - Play owned reinstalls: 13% -> 8%
 - Search reinstalls: 43% -> 53%
- FOP value shrea: 4% -> 8%



PART III: HYPOTHESIS OF VALUE DEFICIT (Tinder)

Current Model (Includes Search), Sharply decreasing play value share:

With the current model, Tinder has a Play Surplus. However, this surplus has decreased over time. Play value share decreased from 113% (2017Q1) to 48% (2019Q1), Straightlining this, the decrease is roughly -8% per quarter

- Play Value has grown during this time, but Consumer Spend (and thus Play Revenue) has grown faster. In short, Play's not keeping up with their growth.
- Even though the actual decline has slowed down in the past 2 quarters, it is reasonable for tinder to believe that at the current trend, play value share would fall under 30% pretty quickly (@-8% speed, it would only take another 2-3 quarters)

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Reference: you can find more numbers and graphs in this [trix](#)

Tinder Value Breakdown

(Period: 2018Q1-2019Q1)

Play Value (Play driven acq., value of FOPs)	\$38.0M
Play Rev	\$112.9M
Consumer Spend	\$376.3M